



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/784,836	02/16/2001	Scott Gillespie	8519-000001	5792
27572 7590 04/19/2007 HARNESSE, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			EXAMINER MEYERS, MATTHEW S	
			ART UNIT	PAPER NUMBER
			3629	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/19/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 09/784,836	Applicant(s) GILLESPIE, SCOTT	
	Examiner Matthew S. Meyers	Art Unit 3629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/15/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 and 44-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 and 44-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is reference to applicant's communication filed on 1/15/07, wherein claims 1-38 and 44-50 are currently pending.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted is being considered by the examiner.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 30-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Vance et al. (U.S. 7,050,986) (Hereinafter referred to as Vance).

5. With respect to **Claim 30**:

Vance discloses a computer-implemented method for determining a scenario market share for a given city pair for a given airline selected from a plurality of airlines, comprising:

providing a market share for the given airline in relation to the given city pair over a given period of time, such that the fair market share is based on schedule-based factors associated with the flights serving the given city pair (Vance col. 4,

lines 31-44, "in communication with any of the airline computerized reservation systems");

determining a travel policy factor for a given airline customer, the travel policy factor being indicative of the given airline customer's ability to shift travelers towards or away from any given airline (Vance col. 4, lines 31-44, "in communication with any of the airline computerized reservation systems"); and

deriving the scenario market share for the given airline in relation to the given city pair from the market share for the given airline in part based on the travel policy factor and by executing a software-implemented application on a computing device (Vance col. 4, lines 31-44, "in communication with any of the airline computerized reservation systems")

6. With respect to **Claim 31**:

Vance discloses the computer-implemented method of Claim 30 further comprises the steps of: determining a second travel policy factor for the given airline customer; and deriving the scenario market share for the given airline in relation to the given city pair from the fair market share for the given airline in part based on the second travel policy factor (Vance col. 4, lines 31-44, "in communication with any of the airline computerized reservation systems").

7. With respect to **Claim 32**:

Vance discloses the computer-implemented method of Claim 30 further comprising the step of determining a sales level factor for one or more of the plurality of airlines, the sales level factor being indicative of an airline's ability to attract the travelers of an airline

Art Unit: 3629

customer to the airline, such that the scenario market share for the given airline is in part based on the sales level factor associated with the given airline (Vance col. 5, lines 5-23, "includes information such as seat preferences, special meals, frequent flier").

8. With respect to **Claim 33**:

Vance discloses the computer-implemented method of Claim 31 further comprising the steps of assigning a supplier status for one or more of the plurality of airlines, the supplier status being indicative of an airline customer's preference of having its travelers use the airline; and determining a sales level-supplier status factor for the given airline, where the sales level-supplier status factor is based on the supplier status and the corresponding sales level factor for the given airlines, such that the scenario market share for the given airline is in part based on the sales level-supplier status factor associated with the given airline (Vance col. 5, lines 5-23, "includes information such as seat preferences, special meals, frequent flier").

9. With respect to **Claim 34**:

Vance discloses a computer-implemented method for determining a scenario market share for a given airline selected from a plurality of airlines, comprising:

providing a market share for the given airline in relation to a given city pair over a period of time, such that the fair market share is based on schedule-based factors associated with the flights serving the given city pair (Vance col. 4, lines 31-44, "in communication with any of the airline computerized reservation systems");

determining a sales level factor for one or more of the plurality of airlines, the sales level factor being indicative of an airline's ability to shift the travelers of an airline customer to the airline (Vance col. 4, lines 31-44, "in communication with any of the airline computerized reservation systems"); and

deriving the scenario market share for the given airline from the fair market share for the given airline in part based on the sales level factor associated with the given airline and by executing a software-implemented application on a computing device (Vance col. 4, lines 31-44, "in communication with any of the airline computerized reservation systems").

10. With respect to **Claim 35**:

Vance discloses the computer-implemented method of Claim 34 further comprising the steps of: determining a second sales level factor for each of the plurality of airlines; and determining the scenario market share for the given airline by adjusting the fair market share for the given airline in part based on the second sales level factor associated with the given airline (Vance col. 7, lines 60-67 and col. 8, lines 1-2, "share agreement").

11. With respect to **Claim 36**:

Vance discloses the computer-implemented method of Claim 34 further the steps of: assigning a supplier status for each of the plurality of airlines, the supplier status being indicative of an airline customer's preference of having its travelers use the airline (Vance col. 5, lines 5-23, "includes information such as seat preferences, special meals, frequent flier") (Examiner notes, frequent flier program would be a sales level factor in

Art Unit: 3629

that it attracts costumers and increases customer loyalty); determining a sales level-supplier status factor for the given airline, where the sales level-supplier status factor is based on the supplier status and the corresponding sales level factor for the given airline; and deriving the scenario market share for the given airline from the fair market share for the given airline in part based on the sales level-supplier status factor associated with the given airline (Vance col. 7, lines 60-67 and col. 8, lines 1-2, "share agreement").

12. With respect to **Claim 37**:

Vance discloses the computer-implemented method of Claim 34 further comprising the step of determining a travel policy factor for a given airline customer, the travel policy factor being indicative airline customer's ability to shift travelers towards or away from any given airline, where the scenario market share for the given airline is in part based on the travel policy factor (Vance col. 4, lines 31-44, "in communication with any of the airline computerized reservation systems").

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3629

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. Claims 1-29 and 45- 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vance in view of Walker et al. (PG Pub. 2002/0161610) (Hereinafter referred to as Walker) and further in view of NBAA's Travel\$ense Business & Commercial Aviation Vol. 79, No. 2; Pg. 60, August 1996 (Hereinafter referred to as Travel\$ense).

16. With respect to **Claims 1:**

Vance discloses, an airline travel supplier evaluation system for analyzing airline flight information in relation to one or more predefined city pairs for a given airline customer, comprising:

a source of airline schedule data from airlines for a plurality of city pairs (Vance col. 4, lines 31-44, "in communication with any of the airline computerized reservation systems");

a memory space for storing the airline schedule data and the city pairs (Vance col. 4, lines 15-19, "corporate database...having 32-63 MB of memory");

an airline fair market share module that accesses the airline schedule data and the city pairs (Vance col. 4, lines 31-44, "in communication with any of the airline computerized reservation systems" and fig. 11, item 292),

Vance does not explicitly disclose the airline fair market share module that calculates an incremental travel time for each flight record serving a given city in relation to the fastest flight serving the given city pair, the airline fair market share module determines a market share for each airline in relation to a given city pair over a period of time and adjusts the market share for each airline based on the incremental travel time associated with flight records serving the given city pair, thereby determining a fair market share for each airline in relation to a given city pair.

However Walker teaches a method that calculates an incremental travel time for each flight record serving a given city in relation to the fastest flight serving the given city pair and the determines a fair market share for each airline in relation to each city pair of the city pairs, (Walker [0066], "flight record for each flight" and Fig 7). Walker also teaches the airline fair market share module determines a market share for each airline in relation to a given city pair over a period of time and adjusts the market share for each airline based on the incremental travel time associated with flight records serving the given city pair, thereby determining a fair market share for each airline in relation to a given city pair (Walker [068], "The RMS 200, in step 1150, uses the information corresponding to each actual flight (i.e., flight number, O&D pair, and departure

date) to generate a record for the actual flight in the forecasted demand analysis database 230.") It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the system for corporate traveler planning of Vance with the method for the sale of airline-specified flight tickets in order to increase the oversight a large corporation would have over its traveling employees. At the same time, this combination would increase employee morale by ensuring they would be spending the least amount of time traveling.

Moreover, in the aggregate a large corporation could slash corporate waste and increase net profits.

17. With respect to **Claim 2**:

Vance discloses the airline travel supplier evaluation system of Claim 1 wherein the airline fair market share module computes an elapsed time for each flight record serving a given city pair using the flight schedule data, identifies a baseline flight record, the baseline flight record having the shortest elapsed travel time from amongst the flight records serving the given city pair; and computes the incremental travel time for each flight record serving the given city pair, where the incremental travel time is the difference between the elapsed travel time of a given flight record and the elapsed travel time for the baseline flight record (Vance col. 9, lines 52-60, "The analyze air usage process").

18. With respect to **Claim 3**:

Walker discloses the airline travel supplier evaluation system of Claim 1 wherein the airline schedule data further includes aircraft type data for each flight record serving the

predefined city pairs, and where the fair market share for a given airline is based on the frequency of operations in the flight records associated with given airline, the aircraft type for each flight record associated with given airline, and the incremental travel time for each flight record associated with the given airline (Walker [0068], "The RMS uses the information corresponding to each actual flight (i.e., flight number O&D pair, and departure date)...").

19. With respect to **Claim 4**:

Vance discloses the airline travel supplier evaluation system of Claim 1 further comprises a scenario market share module that receives non-scheduled based factors and adjusts the fair market share for a given airline based on the non-schedule based factors to determine scenario market share data for each airline in relation to the predefined city pairs (Vance col. 5, lines 5-23, "employee profile database") (Examiner notes, referring to Fig 4, that the employee profile database is in connection with the Sabre), wherein the non-schedule based factors is at least one of a travel policy factor, the travel policy factor being indicative of the airline customer's ability to shift travelers towards or away from any given airline, a sales level factor, the sales level factor being indicative of an airline's ability to attract the travelers of the given airline customer to the airline, a supplier status indicative of an airline customer's preference to have its travelers use the airline is assigned to one or more of the plurality of airlines, or a sales level-supplier status factor is based on the supplier status and a corresponding sales level factor (Vance col. 5, lines 5-23, "includes information such as seat preferences,

special meals, frequent flier”) (Examiner notes, frequent flier program would be a sales level factor in that it attracts costumers and increases customer loyalty).

20. With respect to **Claim 5**:

Walker discloses the airline travel supplier evaluation system of Claim 1 further comprising a source of projected airline travel data over a predefined time period for the given airline customer; a source of airline purchase data; and an expense-based cost module that accesses the projected airline travel data and the airline purchase data, and determines expected travel expense data for the given airline customer based on the scenario market share data (Walker [0034], “analyzes historical demand...to determine the number of actual flights” and fig. 1).

21. With respect to **Claim 6**:

Walker discloses, the airline travel supplier evaluation system of Claim 5 further comprising a source of pricing data relating to an agreement between the given airline customer and at least one airline, wherein the expense-based cost module determines expected travel expense data based in part on the pricing data (Walker fig. 6 and [0058], “which records each selling price for each fare class for a given actual flight”).

22. With respect to **Claim 7**:

Vance and Walker disclose the airline travel supplier evaluation system of Claim 1 further comprising a source of projected airline travel data over a predefined time period for the given airline customer (Walker [0034], “analyzes historical demand...to determine the number of actual flights” and fig. 1), a time-based cost module that accesses the projected airline travel data, the airline schedule data and the scenario

market share data and determines expected travel time for the given airline customer based on the scenario market share data (Walker fig. 1).

However, neither explicitly disclose the time-based cost module further receives a value for a traveler's time and determines expected travel time cost data based on the traveler's time value data and the expected travel time for the given airline customer.

However, Travel\$ense teaches a system which has reports that include a preface that briefly describes some of the tangible and intangible benefits unique to traveling on business aircraft. Then the trip is detailed, by comparing the direct trip costs, the true trip costs and non-business hours away from home of airline, charter and business aircraft. This is followed by a cost analysis, a benefits analysis and some definitions. Additionally, the system also includes an individual's name, title, department, working hours, compensation (either individually or by level), and multiplier factors (program defaults or those supplied by you) that reflect the true value of an employee's contribution to the company (Travel\$ense pg. 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system for corporate traveler planning of Vance and the method for the sale of airline-specified flight tickets in Walker with the system taught in Travel\$ense in order to fully realize the value of an employees time when calculating whether or not to book him on a flight. By knowing the exact value of an employees time, it would be possible to determine if it is cheaper to book a flight which helps meet a market share or if it would make more sense to put that employee on another flight.

23. With respect to **Claim 8**:

Art Unit: 3629

Vance discloses an airline travel supplier evaluation system for analyzing airline flight information in relation to one or more predefined city pairs for a given airline customer, comprising:

- a source of airline schedule data for each predefined city pair (Vance col. 4, lines 31-44, "in communication with any of the airline computerized reservation systems");

- a memory space for storing the airline schedule data, the projected airline travel data, and the airline fair market share information (Vance col. 4, lines 15-19, "corporate database...having 32-63 MB of memory");

- a scenario market share module that accesses the airline fair market share information and receives non-schedule based factors, the scenario market share module adjusts the market share data for a given airline based on the non-schedule based factors to determine scenario market share data for each airline in relation to each city pair of the predefined city pairs (Vance col. 5, lines 5-23, "includes information such as seat preferences, special meals, frequent flier");

and

- a time-based cost module that accesses the projected airline travel data and the flight schedule data, and determines expected travel time for the given airline customer based on the scenario market share data, (Walker [0060], "flight schedule database" and fig. 7).

Vance does not explicitly disclose a source of projected airline travel data over a predefined time period for the given airline customer or disclose a source

of airline fair market share information for a plurality of airlines, the airline fair market share information including schedule-based market share data for each airline in relation to each city pair of the predefined city pairs

However, Walker teaches the disclosure of projected airline travel data over a predefined time period for the given airline customer (Walker [0034], "analyzes historical demand...to determine the number of actual flights" and fig. 1); and the source of airline fair market share information for a plurality of airlines, the airline fair market share information including schedule-based market share data for each airline in relation to each city pair of the predefined city pairs (Walker [0068], "The RMS uses the information corresponding to each actual flight (i.e., flight number O&D pair, and departure date)..."). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the system for corporate traveler planning of Vance with the method for the sale of airline-specified flight tickets in order to find a fast and easy way to not only rearrange travel plans, but to give frequent corporate travelers an up to date system which enables them to maintain their work productivity, while taking advantage of any time saving means possible. A system such as this would allow a corporation to end its dependence on a travel management firm and be able to complete the tasks in-house.

Neither Vance nor Walker explicitly discloses the time-based cost module further receives a value for a traveler's time and determines expected travel time cost data based on the traveler's time value data and the expected travel time for

the given airline customer. However, Travel\$ense teaches a system which has reports that include a preface that briefly describes some of the tangible and intangible benefits unique to traveling on business aircraft. Then the trip is detailed, by comparing the direct trip costs, the true trip costs and non-business hours away from home of airline, charter and business aircraft. This is followed by a cost analysis, a benefits analysis and some definitions. Additionally, the system also includes an individual's name, title, department, working hours, compensation (either individually or by level), and multiplier factors (program defaults or those supplied by you) that reflect the true value of an employee's contribution to the company (Travel\$ense pg. 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system for corporate traveler planning of Vance and the method for the sale of airline-specified flight tickets in Walker with the system taught in Travel\$ense in order to fully realize the value of an employees time when calculating whether or not to book him on a flight. By knowing the exact value of an employees time, it would be possible to determine if it is cheaper to book a flight which helps meet a market share or if it would make more sense to put that employee on another flight.

24. With respect to **Claim 9**:

Walker discloses the airline travel supplier evaluation system of Claim 8 wherein the projected airline travel data is based in part on historical airline travel data for the given

Art Unit: 3629

airline customer (Walker [0035], "utilizes historical data to forecast expected demand over time").

25. With respect to **Claim 10**:

Walker discloses the airline travel supplier evaluation system of Claim 8 wherein the source of airline fair market share information is further defined as an airline fair market share module that accesses the airline schedule data, and determines schedule-based market share data for each airline in relation to each city pair of the predefined city pairs (Walker [0034], "once this determination is made, the RMS instructs the airline scheduling system").

26. With respect to **Claim 11**:

Walker discloses the airline travel supplier evaluation system of Claim 10 wherein the airline fair market share module calculates an incremental travel time for each flight record serving a given city pair in relation to other flight records serving the given city pair, such that the market share data for a given airline is in part based on the incremental travel time for each flight record associated with the given airline (Walker fig. 6).

27. With respect to **Claim 12**:

Vance discloses the airline travel supplier evaluation system of Claim 8 wherein the non-schedule based factors is at least one of a travel policy factor, the travel policy factor being indicative of an airline customer's ability to shift travelers towards or away from any given airline, a sales level factor, the sales level factor being indicative of an airline's ability to attract the travelers of the given airline customer to the airline, a

Art Unit: 3629

supplier status indicative of an airline customer's preference to have its travelers use the airline is assigned to one or more the plurality of airlines, or a sales level-supplier status factor is based on the supplier status and a corresponding sales level factor (Vance col. 5, lines 5-23, "includes information such as seat preferences, special meals, frequent flier") (Examiner notes, frequent flier program would be a sales level factor in that it attracts costumers and increases customer loyalty).

28. With respect to **Claim 13**:

Walker discloses the airline travel supplier evaluation system of Claim 8 further comprising a source of airline purchase data; and an expense-based cost module that accesses the projected airline travel data and the airline purchase data, and determines expected travel expense data for the given airline customer based on the scenario market share data (Walker [0034], "once this determination is made, the RMS instructs the airline scheduling system").

29. With respect to **Claim 14**:

Walker discloses the airline travel supplier evaluation system of Claim 13 further comprising a total travel cost module that receives the expected travel time cost data from the time-based cost module and the expected travel expense data from the expense-based cost module, and determines a total travel cost for the given airline customer (Walker [0038], "The inventory and pricing information for both the special fare listing and the actual flights...").

30. With respect to **Claim 15**:

Vance discloses the airline travel supplier evaluation system of Claim 13 further comprising a source of pricing data relating to an agreement between the given airline customer and at least one airline, wherein the expense-based cost module further determines expected travel expense data based in part on the pricing data (Vance col. 7, lines 60-67 and col. 8, lines 1-2, "share agreement").

31. With respect to **Claim 16**:

Vance discloses an airline travel supplier evaluation system for analyzing airline flight information in relation to one or more predefined city pairs for a given airline customer, comprising:

- source of airline schedule data from a plurality of airlines for a plurality of predefined city pairs (Vance col. 4, lines 31-44, "in communication with any of the airline computerized reservation systems");

- a source of airline purchase data (Vance col. 2, lines 50-58, "Computerized Reservation Service (CRS)");

- a memory space for storing the airline schedule data, airline purchase data, the projected airline travel data information (Vance col. 4, lines 15-19, "corporate database...having 32-63 MB of memory");

- an airline fair market share module that accesses the airline schedule data and the predefined city pairs, and determines market share data for each airline in relation to each city pair of the predefined city pairs (Vance col. 4, lines 31-44, "in communication with any of the airline computerized reservation systems" and fig. 11, item 292);

Vance does not explicitly disclose a source of projected airline travel data over a predefined time period for the given airline customer; an expense-based cost module that accesses the projected airline travel data, the airline purchase data and the market share data; or determining expected travel expense data for the given airline customer based on the market share data from the airline fair market share module; and time-based cost module that accesses the projected airline travel data and the airline schedule data, and determines expected travel time for the given airline customer based on the market share data, the time-based cost module further receives a value for a traveler's time and determines expected travel time cost data by multiplying the value of a traveler's time by the expected travel time for the given airline customer

However, Walker teaches a source of projected airline travel data over a predefined time period for the given airline customer (Walker [0034], "analyzes historical demand...to determine the number of actual flights" and fig. 1); an expense-based cost module that accesses the projected airline travel data, the airline purchase data and the market share data (Walker [0034], "once this determination is made, the RMS instructs the airline scheduling system").

Neither Vance nor Walker explicitly disclose determining expected travel expense data for the given airline customer based on the market share data from the airline fair market share module; and time-based cost module that accesses the projected airline travel data and the airline schedule data, and determines expected travel time for the given airline customer based on the market share

data, the time-based cost module further receives a value for a traveler's time and determines expected travel time cost data by multiplying the value of a traveler's time by the expected travel time for the given airline customer.

However, Travel\$ense teaches a system which has reports that include a preface that briefly describes some of the tangible and intangible benefits unique to traveling on business aircraft. Then the trip is detailed, by comparing the direct trip costs, the true trip costs and non-business hours away from home of airline, charter and business aircraft. This is followed by a cost analysis, a benefits analysis and some definitions. Additionally, the system also includes an individual's name, title, department, working hours, compensation (either individually or by level), and multiplier factors (program defaults or those supplied by you) that reflect the true value of an employee's contribution to the company (Travel\$ense pg. 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system for corporate traveler planning of Vance and the method for the sale of airline-specified flight tickets in Walker with the system taught in Travel\$ense in order to fully realize the value of an employees time when calculating whether or not to book him on a flight. By knowing the exact value of an employees time, it would be possible to determine if it is cheaper to book a flight which helps meet a market share or if it would make more sense to put that employee on another flight.

32. With respect to **Claim 17**:

Walker discloses the airline travel supplier evaluation system of Claim 16 wherein the projected airline travel data is based in part on historical airline travel data for the given customer (Walker [0035], "utilizes historical data to forecast expected demand over time").

33. With respect to **Claim 18**:

Walker discloses the airline travel supplier evaluation system of Claim 16 wherein the airline fair market share module calculates an incremental travel time for each flight record serving a given city pair in relation to other flight records serving the given city pair, such that the market share data for a given airline is in part based on the incremental travel time for each flight record associated with the given airline (Walker [0068], "The RMS uses the information corresponding to each actual flight (i.e., flight number O&D pair, and departure date)...").

34. With respect to **Claim 19**:

Vance discloses the airline travel supplier evaluation system of Claim 16 further comprising a scenario market share module that accesses the airline fair market share information and receives non-schedule based factors which affects an airline's market share data, the scenario market share module further adjusts the market share data for a given airline based on non-schedule based factors to determine scenario market share data for each airline in relation to each city pair of the predefined city pairs (Vance col. 5, lines 5-23, "includes information such as seat preferences, special meals, frequent flier") (Examiner notes, frequent flier program would be a sales level factor in that it attracts costumers and increases customer loyalty).

35. With respect to **Claim 20**:

Vance discloses the airline travel supplier evaluation system of Claim 19 wherein the non-schedule based factor is selected from the group consisting of a travel policy factor, the travel policy factor being indicative of an airline customers ability to shift travelers towards or away from any given airline; a sales level factor, the sales level factor being indicative of an airline's ability to attract the travelers of the given airline customer to the airline; a supplier status indicative of an airline customer's preference to have its travelers use the airline is assigned to one or more of the plurality of airlines, or a sales level-supplier status factor is based on the supplier status and a corresponding sales level factor (Vance col. 5, lines 5-23, "includes information such as seat preferences, special meals, frequent flier") (Examiner notes, frequent flier program would be a sales level factor in that it attracts costumers and increases customer loyalty).

36. With respect to **Claim 21**:

Vance discloses the airline travel supplier evaluation system of Claim 16 further comprising a source of pricing data relating to an agreement between the given airline customer and at least one airline, wherein the expense-based cost module further operable to determine expected travel expense data based in part on the pricing data (Vance col. 7, lines 60-67 and col. 8, lines 1-2, "share agreement").

37. With respect to **Claim 22**:

Walker discloses the airline travel supplier evaluation system of Claim 16 further comprising a total travel cost module that receives the expected travel time cost data from the time-based cost module and the expected travel expense data from the

Art Unit: 3629

expense-based cost module, and determines a total travel cost for the given airline customer (Walker [0038], "The inventory and pricing information for both the special fare listing and the actual flights...").

38. With respect to **Claim 23**:

Vance discloses a computer-implemented method for determining a fair market share for a given airline in relation to a given city pair, comprising:

providing airline schedule data for each flight serving the given city pair, airline schedule data including aircraft type data (Vance col. 4, lines 31-44, "in communication with any of the airline computerized reservation systems");

determining an incremental travel time for each flight serving the city pair using the airline schedule data (Vance col. 4, lines 31-44, "in communication with any of the airline computerized reservation systems" and fig. 11, item 292); and

Vance does not explicitly disclose a fair market share for the given airline by executing a software-implemented application on a computing device, the fair market share based on the ' frequency of flights serving the given city for the given airline, the aircraft type for each flight associated with the given airline, and the incremental travel time of each flight associated with the given airline

Walker teaches adjusting a market share for the given airline by executing a software-implemented application on a computing device and based on the frequency of flights serving the given city for the given airline, the aircraft type for each flight associated with the given airline, and the incremental travel time of each flight associated with the given airline (Walker [0068], "The RMS uses the

information corresponding to each actual flight (i.e., flight number O&D pair, and departure date)..."). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the system for corporate traveler planning of Vance with the method for the sale of airline-specified flight tickets in order to increase the oversight a large corporation would have over its traveling employees. At the same time, this combination would increase employee morale by ensuring they would be spending the least amount of time traveling.

Moreover, in the aggregate a large corporation could slash corporate waste and increase net profits.

39. With respect to **Claim 24**:

Walker discloses the computer-implemented method of Claim 23 wherein the airline schedule data further defined as a plurality of flight records for the given city pair, that each flight record is indicative of one or more flights that serve the given city pair and include a record identifier, an airline identifier, a frequency of the flights over a predefined time period, and detail flight schedule data for each flight comprising the flight record (Walker [0038], "The inventory and pricing information for both the special fare listing and the actual flights...").

40. With respect to **Claim 25**:

Vance discloses the computer-implemented method of Claim 24 wherein the step of determining incremental travel time further comprises the steps of: computing an elapsed travel time for each flight record; identifying a baseline flight record, the baseline flight record having the shortest elapsed travel time from amongst the flight

records serving the given city pair; and computing an incremental travel time for each flight record, where the incremental travel time is the difference between the elapsed travel time of a given flight record and the elapsed travel time for the baseline flight record (Vance col. 9, lines 52-60, "The analyze air usage process").

41. With respect to **Claim 26**:

Walker discloses the computer-implemented method of Claim 25 wherein the step of adjusting a market share further comprises the steps of: determining an aircraft type weighting factor for each flight record (Walker [0068], "The RMS uses the information corresponding to each actual flight (i.e., flight number O&D pair, and departure date)..."); determining an incremental travel time weighting factor for each flight record (Walker fig. 7); determining a pull value for each flight record, where the pull value is computed by multiplying the frequency associated with the flight record with the aircraft type weighting factor and with the incremental travel time weighting factor; and determining a ratio between a sum of the pull values for each of the flight records associated with the given airline and a total sum of the pull values for the plurality of flight records, thereby yielding the fair market share for the given airline (Walker [0012], "examining a plurality of flights which would fulfill the terms").

42. With respect to **Claim 27**:

Vance discloses a computer-implemented method for determining a fair market share for a given airline in relation to a given City pair, comprising:

providing airline schedule data for a plurality of airlines, the airline schedule data including a set of flights which correspond to the given city pair and each

flight having an elapsed travel time (Vance col. 4, lines 31-44, "in communication with any of the airline computerized reservation systems");

identifying a baseline flight, the baseline flight having the shortest elapsed travel time from amongst the set of flights (Vance col. 9, lines 52-60, "The analyze air usage process");

an incremental travel time for each flight in the set of flights, where the incremental travel time is the difference between the elapsed travel time of a flight and the elapsed travel time for the baseline flight (Vance col. 9, lines 52-60, "The analyze air usage process"); and

Vance does not explicitly disclose determining a market share for a given airlines based in part on the incremental travel time of each flight associated with the given airline from the plurality of airlines by executing a software-implemented application on a computing device.

Walker teaches determining a market share for a given airline from the plurality of airlines by executing a software-implemented application on a computing device, where the fair market share is based in part on the incremental travel time of each flight associated with the given airline (Walker [0066], "flight record for each flight"). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the system for corporate traveler planning of Vance with the method for the sale of airline-specified flight tickets in order to increase the oversight a large corporation would have over its traveling employees. At the same time, this combination would

increase employee morale by ensuring they would be spending the least amount of time traveling. Moreover, in the aggregate a large corporation could slash corporate waste and increase net profits.

43. With respect to **Claim 28**:

Walker discloses the computer-implemented method of Claim 27 wherein the set of flights are grouped into a plurality of flight records, such that each flight record is indicative of one or more flights that serve the given city pair and include a record identifier, an airline identifier, a frequency of the flights over a predefined time period, and detail flight schedule data for each flight comprising the flight record (Walker [0038], "The inventory and pricing information for both the special fare listing and the actual flights...").

44. With respect to **Claim 29**:

Walker discloses the computer-implemented method of Claim 28 wherein the step of determining a fair market share further comprises the steps of: determining an aircraft type weighting factor for each flight record (Walker [0068], "The RMS uses the information corresponding to each actual flight (i.e., flight number O&D pair, and departure date)..."); determining an incremental travel time weighting factor for each flight record (Walker fig. 7); determining a pull value for each flight record, where the pull value is computed by multiplying the frequency associated with the flight record with the aircraft type weighting factor and with the incremental travel time weighting factor; and determining a ratio between a sum of the pull values for each of the flight records associated with the given airline and a total sum of the pull values for the plurality of

flight records, thereby yielding the fair market share for the given airline (Walker [0012], "examining a plurality of flights which would fulfill the terms").

45. With respect to **Claim 39**:

Cancelled

46. With respect to **Claim 40**:

Cancelled

47. With respect to **Claim 41**:

Cancelled

48. With respect to **Claim 42**:

Cancelled

49. With respect to **Claim 43**:

Cancelled

50. With respect to **Claim 44**:

Vance discloses a method for defining an airline pricing agreement between an airline customer and a given airline, comprising:

identifying one or more city pairs which are used by travelers of the airline customer, the city pairs being serviced by the given airline (Vance col. 9, lines 52-60, "the analyze air usage process imports data from the trip table, the airline agreements table, and the summary air city table.");

determining a scenario market share for the given airline in relation to the at least one city pair by executing a software-implemented application on a computing device, such that the scenario market share is based on non

schedule-based factors (Vance col. 7, lines 60-67 and col. 8, lines 1-2, "analyzes each preferred airline vendor on a specified city pair and divides..."); and

using at least one of the fair market share or the scenario market share as a basis for a pricing agreement between the airline customer and the given airline (Vance col. 7, lines 60-67 and col. 8, lines 1-2, "share agreement").

Vance does not explicitly disclose determining a fair market share for the given airline in relation to at least one of the city pairs, such that the fair market share is based on schedule-based factors associated with the flights serving the city pair.

However Walker teaches determining a fair market share for the given airline in relation to at least one of the city pairs, such that the fair market share is based on schedule-based factors associated with the flights serving the city pair (Walker [0068], "The RMS uses the information corresponding to each actual flight (i.e., flight number O&D pair, and departure date)..."); It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the system for corporate traveler planning of Vance with the method for the sale of airline-specified flight tickets in order to increase the oversight a large corporation would have over its traveling employees. At the same time, this combination would increase employee morale by ensuring they would be spending the least amount of time traveling. Moreover, in the aggregate a large corporation could slash corporate waste and increase net profits.

51. With respect to **Claim 45**:

Vance discloses the method of Claim 44 wherein the step of using at least one of the fair market share and the scenario market share further comprises defining a pricing arrangement in connection with a volume of the customer's airline travel during a predefined time period, where the volume corresponds to the at least one of the fair market share or the scenario market share for the given airline during the predefined time period (Vance col. 7, lines 60-67 and col. 8, lines 1-2, "analyzes each preferred airline vendor on a specified city pair and divides...").

52. With respect to **Claim 46**:

1. Vance discloses the method of Claim 45 further comprising specifying a minimum or a predefined range of deviation from the at least one of the fair market share or the scenario market share for the volume of travelers from the airline customer (Vance col. 7, lines 60-67 and col. 8, lines 1-2, "analyzes each preferred airline vendor on a specified city pair and divides...").

53. With respect to **Claim 47**:

Vance discloses an airline travel supplier evaluation system for analyzing airline flight information in relation to one or more predefined city pairs for a given airline customer, comprising:

a source of airline schedule data for each predefined city pair (Vance col. 4, lines 31-44, "in communication with any of the airline computerized reservation systems");

a source of airline fair market share information for a plurality of airlines, the airline fair market share information including schedule-based market share data

for each airline in relation to the predefined city pairs (Vance col. 4, lines 31-44, "in communication with any of the airline computerized reservation systems");

a memory space for storing the airline schedule data, the projected airline travel data, and the airline fair market share information (Vance col. 4, lines 15-19, "corporate database... having 32-63 MB of memory"); and

a scenario market share module that accesses the airline fair market share information and receives non-schedule based factors, the scenario market share module further adjusts the schedule-based market share data for a given airline based on the non-schedule based factors to determine scenario market share data for each airline in relation to each city pair of the predefined city pairs (Vance col. 5, lines 5-23, "includes information such as seat preferences, special meals, frequent flier" and col. 4, lines 31-44, "incorporates information that results from the trip planning and expense reporting").

Vance does not explicitly disclose a source of projected airline travel data over a predefined time period for the given airline customer.

However, Walker teaches a source of projected airline travel data over a predefined time period for the given airline customer (Walker fig. 5, "forecasted sales"). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the system for corporate traveler planning of Vance with the method for the sale of airline-specified flight tickets in order to increase the oversight a large corporation would have over its traveling employees. At the same time, this combination would increase employee morale by ensuring they

would be spending the least amount of time traveling. Moreover, in the aggregate a large corporation could slash corporate waste and increase net profits. Furthermore, a system, which would be able to project airline data, would complement a corporate traveler planning system by giving a corporation the ability to plan accordingly to anticipated travel congestion. This foresight would help to keep employees happy and morale high by avoiding long waits at the airport.

54. With respect to **Claim 48**:

Vance discloses the airline travel supplier evaluation system of Claim 47 wherein the non-schedule based factors is further defined as a travel policy factor indicative of an airline customer's ability to shift travelers towards or away from any given airline (Vance col. 4, lines 31-44, "in communication with any of the airline computerized reservation systems").

55. With respect to **Claim 48**:

Vance discloses the airline travel supplier evaluation system of Claim 47 wherein the non-schedule based factors is further defined as a sales level factor indicative of an airline's ability to attract the travelers of the given airline customer to the airline (Vance col. 5, lines 5-23, "includes information such as seat preferences, special meals, frequent flier").

56. With respect to **Claim 49**:

Vance discloses the airline travel supplier evaluation system of Claim 47 Wherein the non-schedule based factors is further defined as a supplier status indicative of an

Art Unit: 3629

airline customer's preference to have its traveler's use the airline is assigned to one or more the plurality of airlines (Vance col. 5, lines 5-23, "includes information such as seat preferences, special meals, frequent flier").

57. With respect to **Claim 50**:

Vance discloses the airline travel supplier evaluation system of claim 47 wherein the non-schedule based factors is further defined as a supplier status indicative of an airline customer's preference to have its travelers use the airline is assigned to one or more the plurality of airlines (Vance col. 5, lines 5-23, "includes information such as seat preferences, special meals, frequent flier").

58. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vance in view of TravelSense.

59. With respect to **Claim 38**:

Vance discloses a computer-implemented method for analyzing airline travel cost information in relation to one or more predefined city pairs for a given airline customer, comprising:

providing airline schedule data for a plurality of airlines, providing projected airline travel data over a predefined time period in relation each of the predefined city pairs for the given airline customer (Vance col. 4, lines 31-44, "in communication with any of the airline computerized reservation systems");

providing market share data for each airline in relation to each of the predefined city pairs (Vance col. 3, lines 8-17, "yearly vendor market share");

determining expected travel time in relation to each airline serving the one or more predefined city pairs, where the expected travel time is computed from the projected airline travel data, the airline schedule data and the airline fair market share data factor (Vance col. 4, lines 31-44, "in communication with any of the airline computerized reservation systems");

determining expected travel time cost data in relation to each airline serving the one or more city pairs by executing a software-implemented application on a computing device, where the expected travel time cost data is computed by multiplying the value of a traveler's time by the expected travel time (Vance col. 4, lines 31-44, "incorporates information that results from the trip planning and expense reporting").

Vance discloses reporting the cost of corporate travel (Vance col. 4, lines 31-44, "automated summary reporting the actual costs of corporate travel"), but does not explicitly disclose identifying a value for a traveler's time. However, Travel\$ense teaches a system that identifies a the value of a traveler's time that includes a preface that briefly describes some of the tangible and intangible benefits unique to traveling on business aircraft. Then the trip is detailed, by comparing the direct trip costs, the true trip costs and non-business hours away from home of airline, charter and business aircraft. This is followed by a cost analysis, a benefits analysis and some definitions. Additionally, the system also includes an individual's name, title, department, working hours, compensation (either individually or by level), and multiplier factors (program defaults or those

supplied by you) that reflect the true value of an employee's contribution to the company (Travel\$ense pg. 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system for corporate traveler planning of Vance with the system taught in Travel\$ense in order to fully realize the value of an employees time when calculating whether or not to book him on a flight. By knowing the exact value of an employees time, it would be possible to determine if it is cheaper to book a flight which helps meet a market share or if it would make more sense to put that employee on another flight.

Response to Arguments

60. Applicant's arguments filed 1/15/07 have been fully considered but they are not persuasive. Examiner has issued a new non-final rejection with reference to new art which better discloses calculating traveler's time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew S. Meyers whose telephone number is (571)272-7943. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (571)272-6812. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MSM
4/16/07

